

## DOE – Medical and Infectious Disease Update – Wednesday, March 03, 2004

DOE weekly updates on Bird Flu, Human Influenza, West Nile Virus, or other illnesses and medical issues will continue as appropriate or as requested. The following information is current as of Thursday, March 04, 2004, 0700 hours, EST. Information presented is routinely taken from the Centers for Disease Control and Prevention (CDC), <http://www.cdc.gov/>, The World Health Organization (WHO), <http://www.who.int/en/>, the Department of Defense Global Emerging Infections Surveillance and Response System site, (DoD-GEIS)-  
<http://www.geis.ha.osd.mil/>, and other creditable sources.

### Recent News

**Bacteria Run Wild, Defying Antibiotics** - 2March2004, By ABIGAIL ZUGER, *The NEW YORK TIMES* --A new chapter in the continuing story of antibiotic resistance is being written in doctors' offices across the country, as a group of common bacteria rapidly becomes resistant to the antibiotics that have been used to treat them for decades. The bacteria are called *Staphylococcus aureus*, or staph for short. Staph are the most common cause of skin infections like boils and can also cause lung infections, bloodstream infections and abscesses in the body's internal organs ... Since the 1970's, doctors have routinely, and successfully, treated staph infections in healthy patients with penicillin-like drugs. Not anymore. Office doctors who follow this practice now may find their patients getting sicker instead of better ...

<http://www.nytimes.com/2004/03/02/health/policy/02INFE.html> - (Note: The NY Times Web service is free but requires that you register on their site, a relatively painless process - Ed.)

**Breast Cancer Vaccine May Halt Tumor Growth** - 01March2004, By Jeanie Lerche Davis, *WEB-MD* --From Italy, there's news that a vaccine seems to slow - or even halt - the growth of breast cancer in mice. It could lead to a new breast cancer treatment and possibly a new preventive measure, researchers say ... study involved mice specially bred to have lots of the HER-2/neu breast cancer gene. Ten weeks after they were born, the mice showed widespread signs of cancerous breast tissue that typically progress to fast-growing, invasive, metastatic tumors ... At that point, half the mice were given a vaccination to boost an immune system response against a protein ... The development of tumors was significantly delayed and kept 48% of the vaccinated mice tumor-free until the experiment ended at week 32 ...

<http://dailynews.att.net/cgi-bin/health?e=pub&dt=040301&cat=news&st=news97536&src=webmd>.

**Optic nerves regrown in lab rats** - 29Feb2004, CAMBRIDGE, Mass., (*United Press International* via COMTEX) -- Scientists at Harvard Medical School say they have regenerated optic nerves in laboratory rats, which augurs well for treating blindness and paralysis. Nerve cells on their own are unable to repair or regrow themselves. Finding a way to fix the damage to nerves has the potential to remedy several problems, such as blindness and paralysis. The Harvard researchers, led by Dr. Larry Benowitz, injected a gene into the lab rats to try to encourage growth of the nerve cells. The gene inhibits proteins that normally prevent regrowth. "When we combined these two therapies -- activating the growth program in nerve cells and overcoming the inhibitory signaling -- we got very dramatic regeneration," Benowitz told the BBC. The study appears in the *Journal of Neuroscience* ...

[http://www.newsventure.com/perl/p/wed/df/Uus-opticnerve.RHSW\\_EFT.html?day=Sun&ygy&g=tw.top](http://www.newsventure.com/perl/p/wed/df/Uus-opticnerve.RHSW_EFT.html?day=Sun&ygy&g=tw.top)

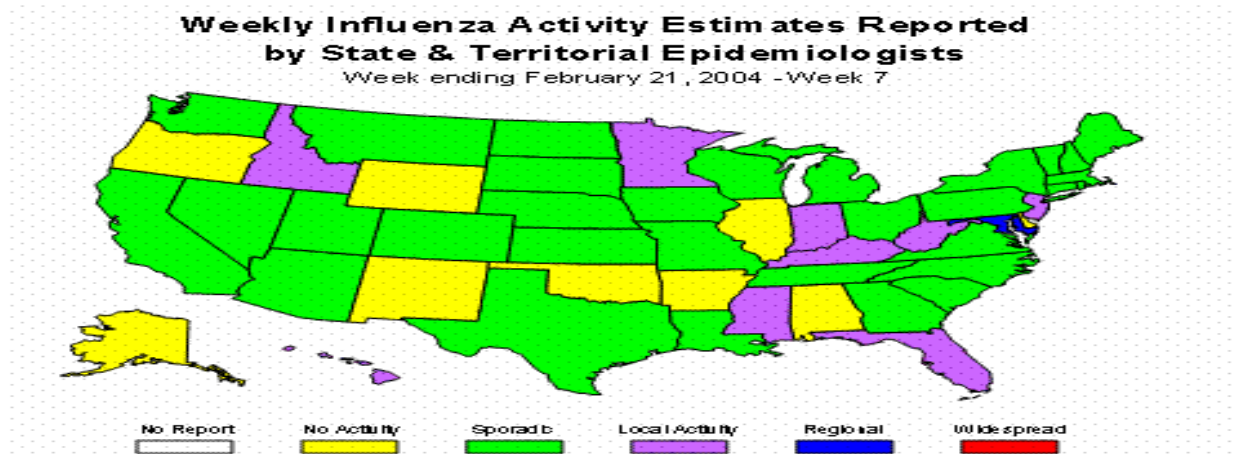
**Bird Flu 2003-2004: Doe Special Medical Update** -- With information from WHO and the CDC, this update also explains the concepts of viral infection, viral replication, antigenic "drift", and antigenic "shift" ... [http://www.eh.doe.gov/health/news/BIRDFLU2003-2004\\_DOESPECIALUPDATE\\_B200402091.pdf](http://www.eh.doe.gov/health/news/BIRDFLU2003-2004_DOESPECIALUPDATE_B200402091.pdf) (PDF) or for a choice of PDF or Word format, <http://www.eh.doe.gov/health/index.html>, and scroll down under "News and Features".

**WHO: Avian influenza-fact sheet** -- 5January2004-Avian influenza ("bird flu") and the significance of its transmission to humans ... [http://www.who.int/csr/don/2004\\_01\\_15/en/](http://www.who.int/csr/don/2004_01_15/en/).

**U.S. Says Flu Activity Has Declined Dramatically** - 1Mar2004, By Paul Simao, ATLANTA (*Reuters*) --This season's influenza epidemic began with a bang in the United States but appears to be ending with a whimper as cases decline to levels below what is normally seen at this

time of year, federal health officials reported on Monday. "The influenza season has really wound down dramatically," Dr. Nancy Cox, chief of the influenza branch at the Centers for Disease Control and Prevention, said during a panel presentation at the International Conference on Emerging Infectious Diseases in Atlanta ... <http://www.reuters.co.uk/newsArticle.jhtml?type=healthNews&storyID=4471832&section=news>.

**CDC Influenza Summary Update** - Influenza activity remained low during the week of February 15-21, 2004. The percentage of patient visits for influenza-like illness (ILI) remained below the national baseline (2.5%). During week 7, mortality due to pneumonia and influenza (P&I) declined below the epidemic threshold for the first time in 10 weeks. There were no reports of widespread influenza activity from state and territorial epidemiologists during week 7. One state reported regional activity, and 9 states reported local activity. Thirty-one states, New York City, Guam, and Puerto Rico reported sporadic activity, and 9 states and the District of Columbia reported no influenza activity ... <http://www.cdc.gov/ncidod/diseases/flu/weekly.htm>.



<http://www.cdc.gov/flu/weekly/usmap.htm>

**CDC West Nile Virus Home** - <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>

## Links to State and Local Government West Nile Virus Web Sites

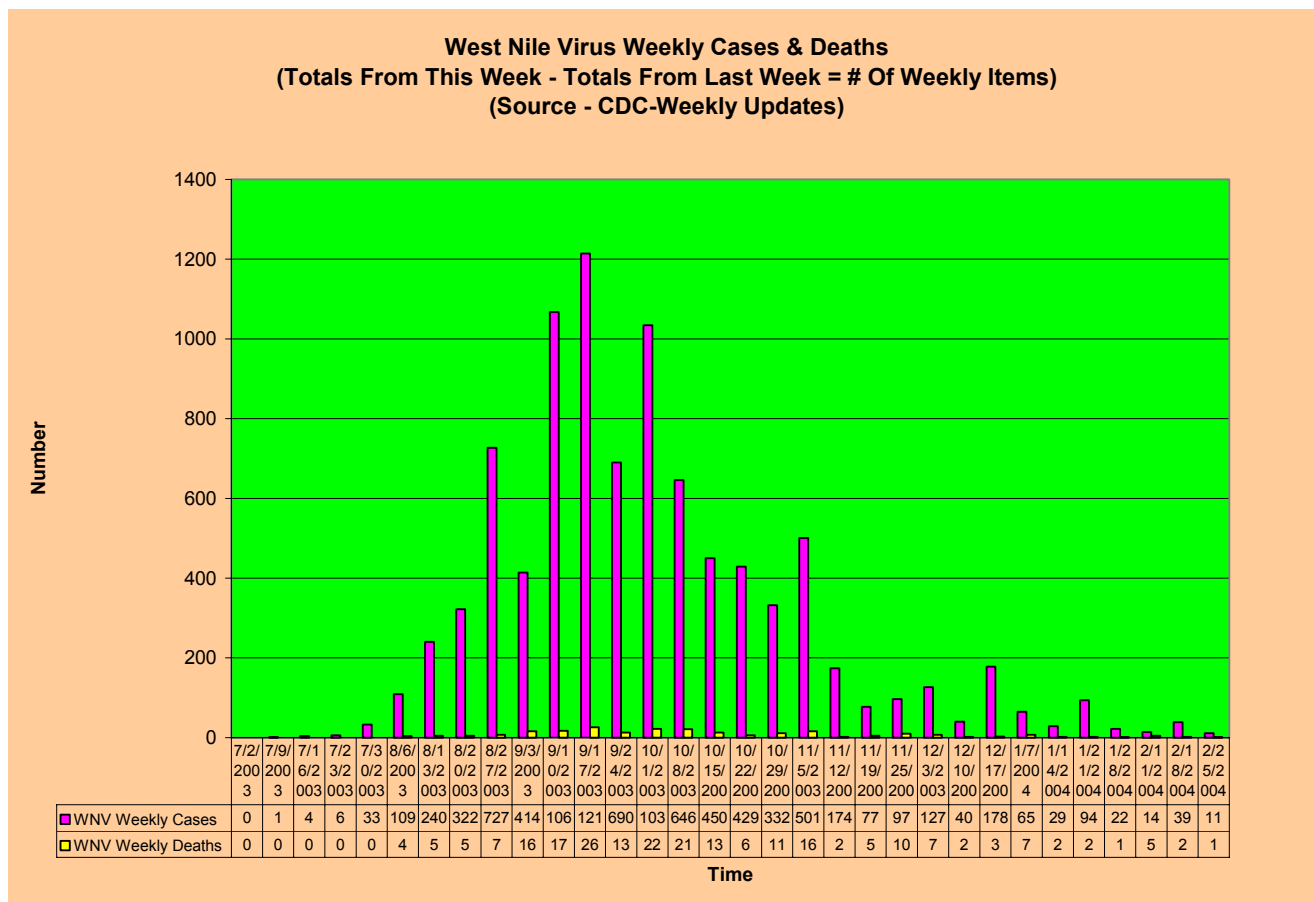
Click on a state to link directly to their West Nile virus Web page.

See list below for additional city-level and main State Health Department Web sites.



**West Nile Virus Interactive Map** – If you go to this site, each State will be ‘HOT’, and moving your mouse on a State will link you to its Health Department’s West Nile web site and bring up other information. Where the CDC map and case summery is a lagging indicator, this map, linked to each State’s Health Department, provides real-time information for those states which update regularly, such as PA and CO. [http://www.mosquitoczar.com/west\\_nile\\_virus](http://www.mosquitoczar.com/west_nile_virus).

**CDC West Nile Virus Case Count** - [Maps](#) reporting WNV activity and [human disease cases](#) reported to CDC were updated on February 27, 2004 and provides weekly information thru February 25, 2004. See the chart below. Total cases and deaths from 46 states stand at 9186 and 231, respectively ... <http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount03.htm>



**George R. Gebus, MD, MPH, Editor**  
**US Department of Energy**  
**Office of Occupational Health, EH-53/270CC**  
**19901 Germantown Road**  
**Germantown, MD 20874-1290**  
**Phone: 301-903-2876**  
**Fax: 301-903-5072**  
**Email: [george.gebus@eh.doe.gov](mailto:george.gebus@eh.doe.gov)**